

50 CFR Part 17**Endangered and Threatened Wildlife and Plants; Proposed Threatened Status and Critical Habitat for the Fish Creek Springs Tui Chub (*Gila Bicolor Euchila*)****AGENCY:** Fish and Wildlife Service, Interior.**ACTION:** Proposed rule.

SUMMARY: The Service propose to determine the Fish Creek Springs tui chub (*Gila bicolor euchila*) to be threatened. This action is being taken because the range and numbers of this species have substantially decreased since collections of this fish were first made in 1938. Primary threats include predation by introduced trouts and overgrazing of nearby lands. The only known Fish Creek Springs tui chub population occurs in Fish Creek Springs, located in Little Smoky Valley of southeastern Eureka County, Nevada. Critical habitat is included with this proposed rule. Special rules are proposed to allow take of the Fish Creek Springs tui chub for certain purposes in accordance with Nevada State laws and regulations. A final determination of *G. b. euchila* to be a threatened species will implement the protection provided by the Endangered Species Act of 1973, as amended. The Service seeks data and comments from the public, State, local, and Federal agencies on this proposal.

DATES: Comments from all interested parties must be received by August 6, 1984. Public hearing requests must be received by July 23, 1984.

ADDRESSES: Comments and materials concerning this proposal should be sent to the Regional Director, U.S. Fish and Wildlife Service, Lloyd 500 Building, Suite 1692, 500 NE. Multnomah Street, Portland, Oregon 97232. Comments and materials relating to this rule are available for public inspection, by appointment, during normal business hours at the above address.

FOR FURTHER INFORMATION CONTACT: Mr. Sanford R. Wilbur, Endangered Species Coordinator, U.S. Fish and Wildlife Service, Lloyd 500 Building, Suite 1692, 500 NE. Multnomah Street, Portland, Oregon 97232 (503/231-6131 or FTS 429-6131).

**SUPPLEMENTARY INFORMATION:
Background**

During pluvial times, 10,000 to 30,000 years before present, large lakes occupied many of the valleys in the Great Basin Province (Hubbs and Miller, 1948; Hubbs *et al.*, 1974). As these lakes dried in response to an increasingly arid environment, aquatic organisms were isolated in remaining permanent waters, such as springs or creeks. It was by this method that a population of tui chubs was isolated in Fish Creek Springs of Little Smoky Valley. The tui chub has adapted to the unique environment provide by Fish Creek Springs and was described as a new subspecies, *Gila Bicolor euchila*, in 1972 (Hubbs and Miller, 1972).

Fish Creek Springs historically consisted of a series of four interconnected springs that comprised the headwaters of Fish Creek. When the tui chubs were first collected in 1938, their range included all four springs and associated outflow creeks for a distance of at least 0.3 miles below the junction of the two main spring-outflow creeks.

Since the original collections of the Fish Creek Springs tui chub, their range and numbers have severely decreased. Historically, they occurred in large number in the springs and their outflow creeks. Surveys conducted during 1978 and 1979 recorded the tui chub from only one of the four springheads and failed to find any tui chubs in the outflow creeks (Hardy, 1980a, b). However, in July 1983, biologists found that tui chubs had returned to three of the four springheads but none were found in the outflow creeks. The westernmost spring in the Fish Creek Springs system has been modified and is not longer connected to the system.

The Fish Creek Springs tui chub is threatened by predation from introduced rainbow trout (*Salmo gairdneri*) and brook trout (*Salvelinus fontinalis*), physical alteration of one springhead and overgrazing of the area surrounding the springs by cattle. Rainbow and brook trouts have been introduced into the Fish Creek Springs ecosystem on many occasions. These trout prey extensively on the tui chubs and restrict them to areas of dense aquatic vegetation in springpools. The habitat is also degraded by cattle overgrazing the vegetation surrounding the spring system. This overgrazing contributes to water pollution, a loss of streambank vegetation that formerly provided cover and a source of terrestrial insects, and siltation from erosion of adjacent soils. In addition, one springhead has been drastically altered to provide a livestock watering tank with no outflow

and is isolated from the remainder of the spring system.

On December 30, 1982, the Service published a Notice of Review of Vertebrate Wildlife for Listing As Endangered or Threatened Species (47 FR 58453-58460). The Fish Creek Springs tui chub was included in this review as a category 1 taxon indicating that the Service has substantial information on hand to support the proposal of this fish for listing under provisions of the Endangered Species Act. On April 12, 1983, the Service was petitioned by the Desert Fishes Council to list the Fish Creek Springs tui chub. The Service reviewed and evaluated the petition and determined that it did present substantial information that the petitioned action may be warranted. The notice of finding for this petition was published in the **Federal Register** on June 14, 1984 (48 FR 27273-27274).

Summary of Factors Affecting the Species

Section 4(a)(1) of the Endangered Species Act (16 U.S.C. 1531 *et seq.*) and regulations promulgated to implement the listing provisions of the Act (codified at 50 CFR Part 424; under revision to accommodate 1982 Amendments—see proposal at 48 FR 36062, August 8, 1983) set forth the procedures for adding species to the Federal lists. A species may be determined to be an endangered or threatened species due to one or more of the five factors described in section 4(a)(1). These factors and their application to the Fish Creek Springs tui chub (*Gila bicolor euchila*) are as follows:

A. *The present or threatened destruction, modification, or curtailment of its habitat or range.* Overgrazing by cattle has contributed to the decline of the tui chub in Fish Creek Springs. Because Fish Creek and Fish Creek Springs are the most available source of perennial water for several miles, they are used extensively for watering by cattle grazing adjacent lands. Cattle have denuded much of the land surrounding the springs. This has exposed the soil to erosion and has resulted in siltation of the habitat. Excrement from cattle and cattle carcasses also contribute to water pollution. Overall, the aquatic habitat has been significantly degraded by overgrazing on adjacent lands. One springhead has been drastically altered to provide a livestock watering tank. This spring presently has no outflow and is isolated from the other springs in the Fish Creek Springs system.

B. *Overutilization for commercial, recreational, scientific, or educational*

purposes. There is no indication that the Fish Creek Springs tui chub is being overutilized for any of these purposes.

C. Disease or predation. The Fish Creek Springs tui chub is the only fish native to the Fish Creek Springs system. However, man has introduced rainbow and brook trouts into these waters. These trouts prey extensively on the tui chubs, and this predation has eliminated the chubs from much of the open water habitat. Tui chubs are now confined to areas of dense aquatic vegetation that provide cover from the predatory trout.

D. The inadequacy of existing regulatory mechanisms. At present, there are State laws regulating the collection or take of Fish Creek Springs tui chubs but there are no regulations pertaining to its habitat. There are no provisions or regulations presently available for the management and recovery of this fish.

E. Other natural or manmade factors affecting its continued existence. There are no other natural or manmade factors known to be affecting the Fish Creek Springs tui chub.

The Service has carefully assessed the best scientific information available regarding the past, present, and future threats faced by this species in determining to propose this rule. Based on this evaluation, the preferred action is to propose to list the Fish Creek Springs tui chub as threatened. The range and numbers of this species have substantially decreased since collections of this fish were first made in 1938. Primary threats include predation by introduced trouts and overgrazing of nearby lands. However, it does not appear that the species is likely to become extinct in the foreseeable future, so endangered status would not be appropriate at this time. Proper management of the species and its habitat should prevent the species from becoming endangered.

Critical Habitat

Critical Habitat, as defined by section 3 of the Act, means: (i) the specific areas within the geographical area occupied by a species, at the time it is listed in accordance with the Act, on which are found those physical or biological features (I) essential to the conservation of the species and (II) that may require special management considerations or protection, and (ii) specific areas outside the geographical area occupied by a species at the time it is listed, upon a determination that such areas are essential for the conservation of the species.

Section 4(a)(3) of the Act requires that critical habitat be designated to the maximum extent prudent and

determinable concurrently with the determination that a species is endangered or threatened. Critical habitat is being proposed for the Fish Creek Springs tui chub and includes four headwater springs of Fish Creek (Eureka County, Nevada) and their outflows, and a 50 foot riparian zone around these springs and outflows.

With respect to the Fish Creek Springs tui chub, the area proposed satisfies all known criteria for the ecological, behavioral, and physiological requirements of the species. Any activities which would alter existing chemical and physical characteristics of aquatic habitat in the springs and outflows, and the adjacent riparian habitat within 50 feet of the aquatic habitat, could adversely impact the Fish Creek Springs tui chub. These include pollution from cattle excrement, increased silt loads from overgrazing or removal of riparian vegetation within and adjacent to the critical habitat, lowering of the water table due to ground water pumping, and diversion of water from the springs and/or outflows. The introduction of exotic fishes (rainbow and brook trouts) contributed to the decline in numbers and distribution of the Fish Creek Springs tui chub. Any exotic fishes which would prey upon or compete with the native chub would bring about further decline of tui chub numbers in the three springs and outflows where they presently occur.

Section 4(b)(8) requires, for any proposed or final regulation that designates critical habitat, a brief description and evaluation of those activities (public and private) which may adversely modify such habitat or may be affected by such designation. Such activities are identified for this species as follows:

1. Pollution of the water and overgrazing of riparian vegetation within the proposed critical habitat. The area proposed as critical habitat is in private ownership but adjacent lands are managed by the Bureau of Land Management. Overgrazing of riparian areas within and adjacent to the critical habitat could result in heavy runoff of soil, silt, cattle excrement, and other debris into the habitat of the tui chub, severely degrading water quality in the springs and outflows.

2. Ground water pumping that would affect water quality and/or quantity issuing from Fish Creek Springs. Any reduction in water quality would stress the fish, possibly resulting in death. Reduction in the quantity of water would reduce the amount of habitat available to the tui chub. This could cause overcrowding and ultimately

result in the loss of the entire population.

3. Introduction of any non-native fishes which would prey upon or compete with the Fish Creek Springs tui chub. Introduced predatory fishes could further prey on the already reduced population of the Fish Creek Springs tui chub. Smaller nonpredatory fishes could compete with the small tui chub for food and shelter.

4. Alteration of springs or outflows for livestock watering irrigation, etc. Tui chubs have been eliminated from one spring because of its conversion to a livestock watering area and the resulting loss of approximately ¼ mile of outflow from the spring head.

The Service is notifying Federal agencies that may have jurisdiction over the land and water under consideration in this proposed action. These Federal agencies and other interested persons or organization are requested to submit information on economic or other impacts of this proposed action. The only Federal activity presently known which may have an impact on the proposed critical habitat of the Fish Creek Springs tui chub is the management of adjacent lands by the Bureau of Land Management.

Section 4(b)(2) of the Act requires the Service to consider economic and other impacts of designating a particular area as critical habitat. The Service will consider the critical habitat designation in light of all additional relevant information obtained at the time the final rule is prepared.

Available Conservation Measures

Conservation measures provided to species listed as endangered or threatened under the Endangered Species Act include recognition, recovery actions, requirements for Federal protection, and prohibitions against certain practices. Recognition through listing encourages and results in conservation actions by other Federal, State, and private agencies, groups, and individuals. The Endangered Species Act provides for possible land acquisition and cooperation with the States and requires that recovery actions be carried out for all listed species. Such actions are initiated by the Service following listing. The protection required by Federal agencies and the prohibitions against taking and harm are discussed, in part, below.

Section 7(a) of the Act, as amended, requires Federal agencies to evaluate their actions with respect to any species that is proposed or listed as endangered or threatened. Regulations implementing this interagency cooperation provision

of the Act are codified at 50 CFR Part 402, and are now under revision (see proposal at 48 FR 29990; June 29, 1983). Section 7(a)(4) requires Federal agencies to informally confer with the Service on any action that is likely to jeopardize the continued existence of a proposed species or result in destruction or adverse modification of proposed critical habitat. When a species is listed, section 7(a)(2) requires Federal agencies to ensure that activities they authorize, fund, or carry out are not likely to jeopardize the continued existence of such a species or to destroy or adversely modify its critical habitat. If a Federal action may affect a listed species or its critical habitat, the responsible Federal agency must enter into consultation with the Service.

The Act and its implementing regulations found at 50 CFR 17.21 and 17.31 set forth a series of prohibitions that generally apply to all endangered or threatened wildlife. These prohibitions, in part, make it illegal for any person subject to the jurisdiction of the United States to take, import or export, ship in interstate commerce in the course of commercial activity, or sell or offer for sale listed species in interstate or foreign commerce. It also would be illegal to possess, sell, deliver, carry, transport, or ship any such wildlife that was illegally taken. Certain exceptions would apply to agents of the Service and State conservation agencies.

The above discussion generally applies to threatened species of fish and wildlife. However, the Secretary has discretion under section 4(d) of the Act to issue such special regulations as are necessary and advisable for the conservation of a threatened species. The Fish Creek Springs tui chub is threatened primarily by habitat disturbance or alteration, not by intentional, direct taking of the subspecies or by commercialization. Given this fact and the fact that the State regulates direct taking of the species through the requirement of State collecting permits, the Service has concluded that the State's collecting permit system is more than adequate to protect the subspecies from excessive taking, so long as such takes are limited to: educational purposes, scientific purposes, the enhancement of propagation or survival of the species, zoological exhibition, and other conservation purposes consistent with the Endangered Species Act. A separate Federal permit system is not required to address the current threats to the species. Therefore, the special rule allows take to occur for the above-stated purposes without the need for a

Federal permit if a State collection permit is obtained and all other State wildlife conservation laws and regulations are satisfied. The special rule also acknowledges the fact that incidental take of the species by State-licensed recreation fishermen is not a significant threat to this species. Therefore, under this special rule such incidental take would not be violation of the Act if the fisherman immediately returned the individual fish taken to its habitat. It should be recognized that any activities involving the taking of this species not otherwise enumerated in the special rule are prohibited. Without this special rule, all of the prohibitions under 50 CFR 17.31 would apply. The Service believes that this special rule will allow for more efficient management of the subspecies, thereby facilitating its conservation. For these reasons, the Service has concluded that this regulatory proposal is necessary and advisable for the conservation of the Fish Creek Spring tui chub.

Public Comments Solicited

The Service intends that any final rule adopted will be accurate and as effective as possible in the conservation of any endangered or threatened species. Therefore, any comments or suggestions from the public other concerned governmental agencies the scientific community, industry, or any other interested party concerning any aspect of these proposed rules are hereby solicited. Comments particularly are sought concerning:

- (1) Biological, commercial trade, or other relevant data concerning any threat (or lack thereof) to the Fish Creek Springs tui chub;
- (2) The location of any additional populations of the Fish Creek Springs tui chub and the reasons why any habitat of this subspecies should or should not be determined to be critical habitat as provided by Section 4 of the Act;
- (3) Additional information concerning the range and distribution of this subspecies;
- (4) Current or planned activities in the subject area and their possible impacts on the Fish Creek Springs tui chub; and
- (5) Any foreseeable economic and other impacts resulting from determining critical habitat.

Final promulgation of the regulation on the Fish Creek Springs tui chub will take into consideration the comments and any additional information received by the Service, and such communications may lead to adoption of a final regulation that differs from this proposal.

The Endangered Species Act provides for a public hearing on this proposal, if

requested. Requests must be filed within 45 days of the date of the proposal. Such requests must be made in writing and addressed to the Regional Director, U.S. Fish and Wildlife Service, Lloyd 500 Building, Suite 1692, 500 N.E. Multnomah Street, Portland, Oregon 97232.

National Environmental Policy Act

The Fish and Wildlife Service has determined that an Environmental Assessment, defined under authority of the National Environmental Policy Act of 1969, need not be prepared in connection with regulation adopted pursuant to section 4(a) of the Endangered Species Act of 1973, as amended. A notice outlining the Service's reasons for this determination was published in the *Federal Register* on October 25, 1983 (48 FR 49244).

Literature Cited

- Hardy, T. 1980a. Interbasin report to the Desert Fishes Council—1978. *Proc. Desert Fishes Council* 10:68-70.
- Hard, T. 1980b. The Interbasin area report—1979. *Proc. Desert Fishes Council* 11:5-21.
- Hubbs, C.L., and R.R. Miller. 1948. The zoological evidence: correlation between fish distribution and hydrographic history in the desert basins of the western United States. Pp. 17-166. *In*: The Great Basin with emphasis of glacial and postglacial times. *Bull. Univ. Utah*. Vol. 38.
- Hubbs, C.L., and R.R. Miller. 1972. Diagnosis of new cyprinid fishes of isolated waters in the Great Basin of western North America. *Trans. San Diego Soc. Nat. Hist.* 17:101-106.
- Hubbs, C.L., R.R. Miller, and C.L. Hubbs. 1974. Hydrographic history and relict fishes of the north-central Great Basin. *Memoirs California Acad. Sci.* 7:1-259.

Author

The primary authors of this proposed rule are Dr. Jack Williams, U.S. Fish and Wildlife Service, 1230 "N" Street, 14th Floor, Sacramento, California 95814 and Mr. Randy McNatt, U.S. Fish and Wildlife Service, 4600 Kietzke Lane, Building C, Reno, Nevada 89502.

List of Subjects in 50 CFR Part 17

Endangered and threatened wildlife, Fish, Marine mammal, Plants (agriculture).

Proposed Regulations Promulgation

PART 17—[AMENDED]

Accordingly, it is hereby proposed to amend Part 17, Subchapter B of Chapter I, Title 50 of the Code of Federal Regulations, as set forth below:

1. The authority citation for Part 17 reads as follows:

Authority: Pub. L. 93-205, 87 Stat. 884; Pub. L. 94-359, 90 Stat. 911; Pub. L. 95-632, 92 Stat.

3751; Pub. L. 96-159, 93 Stat. 1225; Pub. L. 97-304, 96 Stat. 1411 [U.S.C. 1531 *et seq.*].

2. It is proposed to amend § 17.11(h) by adding the following in alphabetical order under "Fishes" to the List of Endangered and Threatened Wildlife:

Species		Historic range	Vertebrate population where endangered or threatened	Status	When listed	Critical habitat	Special rules
Common name	Scientific name						
Fishes:							
Chub, Fish Creek Springs tui.	<i>Gila bicolor euchila</i> .	U.S.A. (NV)	Entire	T		17.95(e)...	17.44()

3. It is further proposed to add the following as a special rule to § 17.44 (the position of this fish in § 17.44 will be determined at the time of final rule).

§ 17.44 Special rules—fishes.

() Fish Creek Springs tui chub, *Gila bicolor euchila*.

(1) No person shall take the species, except in accordance with applicable State fish and wildlife conservation laws and regulations in the following instances: (i) For educational purposes, scientific purposes, the enhancement of propagation of survival of the species, zoological exhibition, and other conservation purposes consistent with the Act; or (ii) incidental to State-permitted recreational fishing activities, provided that the individual fish taken is immediately returned to its habitat.

§ 17.11 Endangered and threatened wildlife.

(h) * * *

§ 17.95 Critical habitat—fish and wildlife.

(e) Fishes.
* * *

Fish Creek Springs tui chub (*Gila bicolor euchila*)

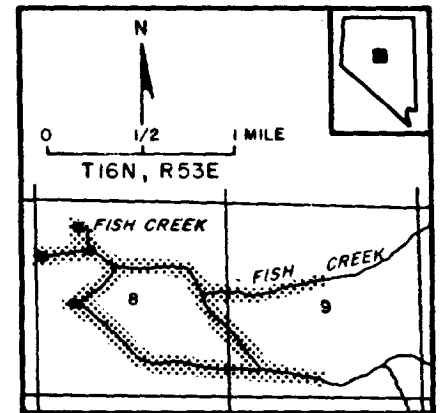
Nevada. Eureka County. Fish Creek springs, their outflow creeks and the riparian area within 50 feet on all sides of these waters within T16N, R53E, Sec. 8, W½ Sec. 9. Known constituent elements include clean permanent flowing spring-fed pools and streams with deep pool areas, aquatic vegetation, and the absence of exotic fishes.

(2) Any violation of applicable State fish and wildlife conservation laws or regulations with respect to the taking of this species will also be a violation of the Endangered Species Act.

(3) No person shall possess, sell, deliver, carry, transport, ship, import, or export, by any means whatsoever, any such species taken in violation of these regulations or in violation of applicable State fish and wildlife conservation laws or regulations.

(4) It is unlawful for any person to attempt to commit, solicit another to commit, or cause to be committed, any offense defined in paragraphs (1) through (3) above.

4. It is further proposed to amend § 17.95(e) by adding critical habitat of the Fish Creek Springs tui chub as follows (the position of this entry under § 17.95(e) follows the same sequence as the species occurs in § 17.11):



* * *
Dated: May 18, 1984.

J. Craig Potter,
Acting Assistant Secretary for Fish and Wildlife and Parks.

[FR Doc. 84-15139 Filed 6-5-84; 8:45 am]

BILLING CODE 4310-55-M